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NOTES ON SOME WEST AMERICAN CHITONS.

BY H. A. PILSBRY.

I.

Among some interesting small Chitons from San Pedro, California, collected by Mr. T. S. Oldroyd, which I have lately examined (through the kindness of Dr. Dall), the following call for especial notice, as they offer differences from the types figured in the Manual of Conchology.

Mopalia imporcata Cpr.

The single specimen measures 9 by 18½ mm., and is somewhat more elevated than the type of the species; color pale olivaceous, white towards the girdle, speckled on the ribs of lateral areas with brown, and with a brown patch on each pleural tract. The teeth are very distinctly thickened along the outer edges of the slits, as in the typical *Callistochitons*. Sculpture typical.

The color is different from that of the type, and the specimen is larger.

Ischnochiton scabricostatus Cpr.

Lateral areas with four (on one side of valve ii, five; on one side of valves iv and v, three) radial riblets, which are *very weakly*, hardly perceptibly, granose. Sutures very feebly crenate. Anterior and posterior valves with 9 slits each. Color reddish (but not at all of an orange cast), with a few inconspicuous white spots on some of the lateral areas.

The typical specimen of *I. scabricostatus* was orange with some dark sutural dots, and the lateral areas are three ribbed, some low pustules on the ribs. It was described from Catalina Island.

Both this species and the last are excessively rare in collections.

II.

A series of Chitons received from Miss Ida M. Shepard, of Long Beach, Cal., contained specimens of a *Callistochiton*, which, while allied to *C. decoratus* Cpr. of Lower California, yet differs in important respects.

Callistochiton decoratus var. *punctocostatus* n. v.

Similar to *C. decoratus* in sculpture of end valves and lateral areas; but the central areas have no wide, smooth triangle at the ridge, such as types of *decoratus* have (Man. of Conch., xiv, pl. 58, fig. 18); being somewhat irregularly pitted toward the beaks, and with rows of pits on each side of a small oblong smooth tract at the ridge; most valves pitted also on the ridge anteriorly.

III.

Finally, with numerous other interesting species collected by Dr. Benj. Sharp in Alaskan waters during the summer of 1895, there were two specimens of a new and unusually distinct form, which we dedicate to that accomplished zoologist.

Trachydermon Sharpii n. sp.

Shell oblong, elevated, carinated, the side slopes somewhat convex. Surface to the naked eye smooth; lustreless; slightly soiled white, with some faint and ill-defined brownish spots on the lateral areas, the girdle gray.

Anterior valve smooth, with some indistinct concentric grooves; the anterior slope shorter than the posterior edges; hind margin emarginate. Intermediate valves wide and short, with slightly arcuate margins at junction with girdle, hind margins emarginate. Central areas very minutely roughened by diverging wrinkles; lateral areas slightly raised, with a few arcuate faint grooves in the direction of growth-lines. Posterior valve highest at its anterior margin, the subcentral mucro but slightly projecting, the slope behind it about straight.

Interior white; valve callus strong; sinus concave and shallow, not defined at the edges; sutural laminae but little projecting, broadly rounded, invading the sinus. Insertion plates hardly longer than

the narrowly channelled and solid eaves, sharp and smooth. Slits in valve i, 16; valves ii to vii, 1-1 or 2-1 or 2-2, the larger number prevailing on the more anterior valves; in valve viii, 13. Posterior tooth in the median valves square and well developed.

Girdle rather unevenly covered, with convex, pebbly, coarse scales, those toward the outer margin elongated, and there is a copious marginal fringe of stout hyaline spinules.

Gill-row three-fourths the length of foot, with 21 plumes on each side.

Length about 14, breadth 8 mm.

Unalaska (Dr. Benj. Sharp!).

The number of slits is unusually great, and they are doubled in some valves; the girdle scales are coarse, the marginal fringe conspicuous. These characters, together with the general smoothness of the valves externally, and the undefined, concave sinus, will readily distinguish the species. In view of its numerous slits, solid leaves and coarse girdle-scales, it is aberrant for a *Trachydermon*; but the girdle is not that of *Trachyradsia* nor *Ischnochiton*, and the gill-row is short, extending forward only three-fourths the length of the foot, as in the true *Trachydermons*. It has not the spongy eaves and sinus of *Spongioradsia*.

The slitting of the intermediate valves is variable, but mainly Radsiod. In valve ii there are 2-2 slits; valves iii, iv, v, 2-1; valves vi, vii, 1-1 slits, in the type specimen.

ON THE AMERICAN SPECIES OF CYRENOIDEA.

BY W. H. DALL.

The genus *Cyrenoidea* was published in June, 1835, by de Joannis, in the *Magazin de Zoologie*; by a typographical error, apparently, the Latin form, which was used only once in the article, was printed *Cyrenoida*. A little later in the same year, Deshayes reclaimed the genus for his manuscript name of *Cyrenella*, which had been read to the Société Philomathique in December, 1834. The first published name, corrected as above, has been adopted, in spite of the objection to its formation as a Latin name with a Greek suffix.

The original type, *C. Duponti* Joannis, is from the Senegal River, West Africa, and it seems that his specimen was defective, since in